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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,920	11/28/2001	Bruce Arthur Lueckenhoff	CIS01-17(4404)	1152

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08/11/2005

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EXAMINER

DOAN, DUYEN MY

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/995,920

Applicant(s)

LUECKENHOFF, BRUCE ARTHUR

Examiner

Duyen M. Doan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-42 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 11/28/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

Detail Action

Claims 1-42 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8-11, 18, 21-31, 32-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Besser et al (us pat 6496867) in view of Naudus et al (us pat 6292839).

As regarding claim 1, Besser et al disclosed detecting an initial request at the beginning tunneling device (col.7, line 62-67, col.8, line 1-20); identifying the initial request as a candidate to be converted to a tunneling request (col.7, line 62-67, col.8, line 1-20); forwarding the tunneling request towards an end tunneling device (col.7, line 62-67, col.8, line 1-20).

Besser et al did not disclose modifying at least one indicator of an initial header in the initial request to convert the initial request into the tunneling request.

Naudus et al taught disclose modifying at least one indicator of an initial header in the initial request to convert the initial request into the tunneling request (col.4, line 48-67, col.5, line 1-22).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Naudus et al's teachings with the teachings of Besser et al, for the purpose of allowing supplemental services to be added to a network device such a gateway, in less time with less expense (see Naudus et al col.2, line 39-48).

As regarding claim 2, Besser et al-Naudus et al disclosed detecting that a destination address in the initial request is for a destination device associated with an end tunneling device, (see Besser et al col.7, line 62-67, col.8, line 1-20). Identifying any initial request received that has a particular source address as being designated to become a tunneling request (col.7, lines 62-67 to Col.8, lines 1-20). Interpreting information from an initial header in order to identify that the initial request is intended to be a tunneling request (col.7, lines 62-67 to Col.8, lines 1-20).

As regarding claim 3, Besser et al-Naudus et al discloses setting the protocol indicator in the initial header to a value indicating that the initial request is a tunneling request (see Naudus et al col.4, line 48-67, col.5, line 1-22). The same motivation were utilized in claim 1, are applied equally as well to claim 3.

As regarding claim 4, Besser et al-Naudus et al discloses replacing a destination address of a destination device in the initial header with an end tunneling address of an end tunneling device to produce a tunneling header (see Naudus et al col.5, line 1-67). The same motivation were utilized in claim 1, are applied equally as well to claim 4.

As regarding claim 5, Besser et al discloses specifying a destination code within the tunneling header for at least one of a plurality of destination addresses of destination devices served by the end tunneling device (col.12, line 45-67), Naudus also discloses similar aspect of the claim invention (see Naudus col.6, line 10-67).

As regarding claim 6, Besser et al-Naudus et al discloses the initial request received by the beginning tunneling device is in the format of a TCP/IP protocol (see Besser et al col.6, line 7-34) and wherein the step of specifying comprises the steps of: generating a destination code to designate a destination address served by the end tunneling device and storing the destination code in a fragment offset field of an IP header of the tunneling request (see Besser et al col.7, line 7-26).

As regarding claim 8 is rejected for the same rationale as claims 3,4,7 above because claim 8 is the combination of claim 3,4,7.

As regarding claim 9, Naudus et al discloses the initial request and the tunneling request are the same size (col.5, line 8-22 (Naudus et al did not expressly teach the size of initial request and tunneling request are the same size but he teach instead of adding another IP header to the original packet, hidden virtual tunnel created by modifying headers in the original data packets)). The same motivation were utilized in claim 1, are applied equally as well to claim 9.

As regarding claim 10, Naudus et al discloses the initial and tunneling request include respective initial and tunneling headers of the sane size (col.5, line 8-22 (Naudus et al did not expressly teach the size of initial request and tunneling request are the same size but he teach instead of adding another IP header to the original

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packet, hidden virtual tunnel created by modifying headers in the original data packets)).

The same motivation were utilized in claim 1, are applied equally as well to claim 10.

As regarding claim 11, Naudus et al discloses the initial request is a full initial request and wherein the full initial request can be fully converted into a single tunneling request (col.5, line 8-22). The same motivation were utilized in claim 1, are applied equally as well to claim 11.

As regarding claims 21-31 are rejected for the same rationale as claims 1-11.

As regarding claim 18 is rejected for the same rationale as claims 13, 14, 17.

Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naudus et al (Us pat 6292839) (hereinafter Naudus) in view of Genty et al (us pat 6675225) (hereinafter Genty).

As regarding claim 12, Naudus et al discloses detecting a tunneling request (col.7, lines 33-67); identifying the tunneling request as a candidate to be an initial request to be converted to an initial request (col.7, lines 33-67). Naudus did not expressly disclose modifying the at least one indicator of a tunneling header in the tunneling request to convert the tunneling request into the initial request and forwarding the initial request towards a destination device.

Genty taught modifying the at least one indicator of a tunneling header in the tunneling request to convert the tunneling request into the initial request and forwarding the initial request towards a destination device (col.9, lines 1-42).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the teaching of Genty to the tunneling method of Naudus to have modifying the at least one indicator of a tunneling header in the tunneling request to convert the tunneling request into the initial request and forwarding the initial request towards a destination device, for the purpose of providing secure communication over an open network infrastructure using a more secure form of virtual private network tunnels (see Genty col.2, lines 32-36).

As regarding claim 13, Naudus-Genty disclosed setting a protocol indicator obtained from the tunneling header to a value to convert the tunneling request to an initial request (see Naudus et al col.4, line 48-67, col.5, line 1-22).

As regarding claim 14, Naudus-Genty disclosed replacing an end tunneling address of the end tunneling device in the tunneling header with a destination address to produce an initial header (see Naudus et al col.5, line 1-67).

As regarding claim 15, Naudus-Genty disclosed obtaining a destination code within the tunneling header for at least one of a plurality of destination addresses of destination devices served by the end tunneling device; and wherein the destination address used in the step of replacing is determined by the destination code (see Naudus col.6, line 10-67).

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naudus et al (us pat 6292839) (hereinafter Naudus) and Genty et al (us pat 6675225)

(hereinafter Genty) as applied to claim 12 above and further in view of Besser et al (us pat 6496867) (hereinafter Besser).

As regarding claim 16, Naudus-Genty disclosed all the limitations of claim 12 above but the combination of Naudus and Genty does not expressly disclose the tunneling request received by the end tunneling device is in the format of a TCP/IP protocol and wherein the step of obtaining comprises the steps of: reading a destination code from a fragment offset field of an IP header of the tunneling request; and from the destination code, ascertaining the destination address served by the end tunneling device.

Besser taught the tunneling request received by the end tunneling device is in the format of a TCP/IP protocol (see Besser et al col.6, line 7-34) and wherein the step of obtaining comprises the steps of: reading a destination code from a fragment offset field of an IP header of the tunneling request; and from the destination code, ascertaining the destination address served by the end tunneling device (see Besser et al col.7, line 7-26).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the teaching of Besser to the method of Naudus-Genty to have the tunneling request received by the end tunneling device is in the format of a TCP/IP protocol and wherein the step of obtaining comprises the steps of: reading a destination code from a fragment offset field of an IP header of the tunneling request; and from the destination code, ascertaining the destination address served by the end tunneling device, for the purpose of establish a tunneling association that hides the

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identity of the originating and terminating ends of the tunneling association from the other users of a public network (see Besser col.2, lines 36-41).

As regarding claims 32-38, are rejected for the same rationale as claims 12-18.

As regarding claims 41-42 are rejected for the same rationale as claim 1.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naudus et al (us pat 6292839) and Genty et al (us pat 6675225) (hereinafter Genty) as applied to claim 12 above, and further in view of Provino (us pat 6557037).

As regarding claim 17, Naudus and Genty disclosed all the limitation of claim 12 above, the combination of Naudus and Genty did not disclose setting an error correction code in the tunneling header to reflect modifications made to convert the initial header to the tunneling header.

Provino discloses setting an error correction code in the tunneling header to reflect modifications made to convert the initial header to the tunneling header (col.3, line 64-67, col.4, line 1-20).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Provino's teachings with the method of Naudus and Genty, for the purpose of verify that the message packet was correctly transferred from the source to the destination device (incase of error detection information) and correct selected types of errors if the message packet was not

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correctly transferred (in the case of error correction information) (see Provino col.4, line 12-20).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Besser et al (us pat 6496867) (hereinafter Besser) and Naudus et al (us pat 6292839) as applied to claim 12 above, and further in view of Provino (us pat 6557037).

As regarding claim 17, Besser-Naudus disclosed all the limitation of claim 1 above, the combination of Besser-Naudus did not disclose setting an error correction code in the tunneling header to reflect modifications made to convert the initial header to the tunneling header.

Provino discloses setting an error correction code in the tunneling header to reflect modifications made to convert the initial header to the tunneling header (col.3, line 64-67, col.4, line 1-20).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Provino's teachings with the method of Besser and Naudus, for the purpose of verify that the message packet was correctly transferred from the source to the destination device (incase of error detection information) and correct selected types of errors if the message packet was not correctly transferred (in the case of error correction information) (see Provino col.4, line 12-20).

Response To Argument

In response to Applicant's argument on amended claim 1, that "Besser and Naudus fail to disclose or suggest identifying an initial request as a candidate to be converted into a tunneling request". The combination of Besser and Naudus does not disclose identifying an initial request to be a tunneling request (see Besser col.2, lines 45-67). In Besser receiving a request to initiate the tunneling association, if the request is to initiate the tunneling association, then it is the candidate to be converted into a tunneling request.

In response to Applicant's second argument on claim 2,22, "Neither Besser nor Naudus disclose at least one of detecting that a destination address in the initial request is for a destination device associated with an end tunneling device, identifying any initial request received that has a particular source address as being designated to become a tunneling request, and interpreting information from an initial header in order to identify that the initial request is intended to be a tunneling request". Besser disclosed, "The request includes a unique identifier for the terminating end of the tunneling association (see Besser col.8, lines 1-20). The system of Besser and Naudus can modify the header for tunneling. If Naudus modifying the header, interpreting of the information from initial header can obviously be done before modifying the header.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

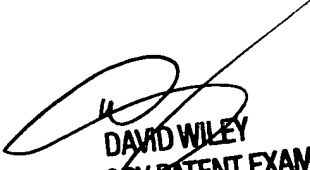
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duyen M Doan whose telephone number is (571) 272-4226. The examiner can normally be reached on 9:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner
Duyen Doan
Art unit 2143
DD


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